European Space Agency

XMM-Newton and INTEGRAL weekly Mission Operations Report

XMM-INT-WOPS-12_46

Issue 1

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1. Weekly report

	XMM	**Integral**
Main activities	▪ Re-lubrication P1: 12 November ▪	▪ Nominal Science Operations ▪ Battery 2 Reconditioning
Status and performance of S/C	▪ Nominal for platform and all instruments	▪ Nominal for platform and payload.
Status and performance of Ground segment	▪ Problem with AGO G/S during transponder swap	▪ Ongoing occasional RFI at Redu, some sources identified; filter installed for testing
S/C Anomalies	▪ MACS BUS transaction FAILED: MACS head of RW1 not initialised, since RW1 is not active in Word B selection. **See AR XMM_SC_84 for details.**	▪
G/S Anomalies	▪ None	▪ INT-3311 Killing a task via MCCM does not work ▪ INT-3312 MCCM reported sw discrepancy on imcb ▪ INT-3313 Extra lines inserted into 1236_02.PSF
Future activities planned	▪ Assess results of Re-lubrication P1 with Industry ▪ Re-lubrication P2: 27 November ▪ DDR1 4WD: 05.12. ▪ Astrium Meeting 11.+12 .12. ▪ Maspalomas configuration as backup G/S	▪ Virtualised Solaris environments MCS development ▪ Set up and validation of Kiruna ▪ Earth observation 20-21/11/2012 ▪ Eclipse season starts 29/11/2012

2. Detailed weekly operational events

note: all times are Zulu

2.1. XMM

2012-11-12 09:35:00 (317)	Start execution of procedure FCP_AOC_0733 – RW1 Short Re-lubrication
2012-11-12 11:52:00 (317)	Heater ON command sent, Report and content checked. Command authorised.
2012-11-12 11:52:39 (317)	MACS BUS transaction FAILED: MACS head of RW1 not initialised, since RW1 is not active in Word B selection. **See AR XMM_SC_84 for details.**
2012-11-12 12:06:04 (317)	Heater commanded OFF. Current of the heater to zero. Proof that the RW1 MACS transaction for RW1 eventually went through. Because of the MACS bus problem, the TCM transition is delayed by 30 minutes. Backup commands for TTAGs will be used. New T time: T = 12:45z
2012-11-12 12:07:14 (317)	Heater ON again. Current to 0.32 Amps. No MACS bus transaction failure this time!
2012-11-12 13:17:00 (317)	TCM self transition - RW1 commanded to 500 rpm (first time a self transition is ever commanded on XMM!). No problem.
2012-11-12 20:04:00 (317)	OCR_3056 step # 4 - FF/CCAL exposure for EPIC-MOS1/2/PN CRP_EM1_1500 Rejoin Timeline CRP_EM2_1500 Rejoin Timeline CRP_EPN_1500 Rejoin Timeline
2012-11-12 21:28:00 (317)	Start OSL 2368_50_M.OSL generated by FD-Support (A. M. /R. K.)
2012-11-12 22:56:00 (317)	Start CSL 2368_51_M.CSL generated by FD-Support (R. K.)
2012-11-13 13:26:00 (318)	Uplinked Rev_2368_TANK_TSW_TTAGS.sun201 as Instructed by SOE TCS This is to correct the TANK1 temperature by -1.5 deg.
2012-11-14 22:20:00 (319)	CSL update failed. FDS error message: Update slew fail to generate IPF(Level 2)
2012-11-14 22:21:00 (319)	Disabled S/S: 1 & 9
2012-11-14 22:22:25 (319)	FCP_AOC_0106 STR-A Mapping
2012-11-14 22:30:00 (319)	SPACON Tool started ,FDS: Slew can not be performed as a closed loop slew. OSL was generated. Called FD-support for confirmation and authorised to GA with OSL. Advised to generate the corrective CSL after the end of OSL.
2012-11-14 23:19:01 (319)	2369_51_M.CSL-XMM_SPACON Uplinked
2012-11-14 23:29:00 (319)	S/C on target
2012-11-14 23:37:03 (319)	OOL AD162 WHEEL -1 CAGING HH (CAGING)
2012-11-15 00:38:00 (320)	AD162 WHEEL -1 CAGING : Went Back to Limit

2012-11-15 03:20:00 (320)	ACH MANAGER - Crashed & CMD Multiplexer also automatically disconnected
2012-11-15 03:24:00 (320)	FCP_RFS_0152 Change from TRSPTX B /ANT2 to TRSPTX A /ANT1
2012-11-15 03:52:00 (320)	RFS: Lost Bitlock at AGO , Informed ESTRACK
2012-11-15 03:53:00 (320)	XMM_XMC_0006 - Stop & Restarted MULTI,OBQM,Releaser and Verifier
2012-11-15 04:04:00 (320)	Failure of TC SEQ:GE1603 & LE9131 (RGS QDUMP) due to lost TC capability at AGO . Impacts and recovery actions: NONE
2012-11-15 04:20:00 (320)	Requested AGO to Re-sweep. AGO attempted couple of times , either they are unable to lock the RX1 or lock both RXs. At 04.19 AGO managed to Lock RX1 with stable uplink
2012-11-15 04:20:00 (320)	AD Service established, D3831 Link Test CMD successful
2012-11-15 04:21:00 (320)	S/S: 7& 8 enabled on A/S as per CRP_RG1+2_1500 : Rejoin Timeline
2012-11-15 22:05:00 (320)	During G/S Handover , observed that RNG is not on Uplinked TC:R0111 TRSP1 RG ON A
2012-11-16 14:20:00 (321)	OOL P1112 LCL STA IMU1 CLOSE
2012-11-16 14:22:00 (321)	CSL update failed. FDS error message: update slew failed to determine input for IPF generation S/S 1 disabled (CRP_AOC_4061)
2012-11-16 14:32:00 (321)	FCP_AOC_0106 STR-A Mapping
2012-11-16 14:42:00 (321)	Start CSL 2370_50
2012-11-16 14:56:00 (321)	S/S 1 enabled
2012-11-18 15:24:00 (323)	OOL AD162 Wheel 1 Caging
2012-11-18 16:38:00 (323)	At OBS_START radiation was coming down quickly and wrongly left S/S 3,4,5 enabled as I thought that WF would be inactive within the next minute
2012-11-18 16:41:00 (323)	OOL_F01 PN RAD alert, Autocommanding triggered

2.1 INTEGRAL

2012-11-13 (318)
03:03:00 SYS: Error sending data to isds(a)
03:13:00 SYS: Error sending data to isds(a) - ca. every 30 minutes
07:00:00 Start of IMU calibration (1,2,3,4) pre eclipse season and EO2.5

2012-11-14 (319)
12:00:00 GS: Start of INT_OPS_756: "Transponder 2 Testing with Kiruna GS"
12:25:00 Carrier up from KIR1 using RX2 frequency --> locked RX2 successfully
14:09:00 Update of TIM and SAS thresholds
21:23:50 OEM: "ACC AIMU ON", TM: P1112 'LCL STA IMU1' SCC FAIL -OOL (CLOSE)
21:52:00 FDS: TPF 1232_0500_A.OSL applied on A/S to update slew 12320010

2012-11-15 (320)
09:22:00 Battery2 reconditioning discharge stopped
10:00:00 G/S: Bad Frames from: Redu, duration: 10 sec, reason RFI, source unknown
11:24:09 Start of battery 2 full charge at C/13 post reconditioning
21:47:00 TPF update failed for SlewID #12320033. FDS error message: Update slew fail to generate IPF(Level 2). CSL #12320033 missed from timeline
22:06:27 Manual slew 1232_0501_M.OSL from PID #12320032 to #12320033
22:33:00 FDS: TPF 1232_0502_A.CSL applied on A/S to update slew 12320034

2012-11-16 (321)
00:06:00 TPF update failed for SlewID #12320036. FDS error message: Update slew fail to generate IPF(ATTD Verification Failed)
00:10:00 FDS SPACON TOOL reports same error
00:57:00 OSL #12320036 missed from timeline
01:16:00 Manual slew 1232_0503_M.OSL from PID #12320035 to #12320036
01:32:00 FDS: TPF 1232_0504_A.CSL applied on A/S to update slew 12320037
08:53:30 End of Battery 2 reconditioning recharge.

2012-11-17 (322)
10:20:00 AOS post perigee. On MSTACK and ASTACK LINK TC: NO G/S. Restart TC chain
10:28:00 TC link connected ok on inctra, but on MSTACK and ASTACK LINK TC: NO G/S
10:45:00 Swapped to B-chain
12:21:00 restart of imca, SOE informed
12:29:00 FCP_MCS_0011 operations swap imcb to imca

2012-11-18 (323)
15:54:19 OEM: "ACC AIMU ON"
16:14:00 FDS: TPF 1233_0500_A.OSL applied on A/S to update slew 12330031

2012-11-19 (324)
01:20:00 Bad Frames from: Redu, duration: 10 sec, reason RFI, source unknown, chain 1 only